

EP

الأمم المتحدة

Distr.
GENERAL

UNEP/OzL.Pro/ExCom/90/17
26 May 2022

برنامج
الأمم المتحدة
للبيئة



ARABIC
ORIGINAL: ENGLISH

اللجنة التنفيذية للصندوق المتعدد الأطراف
لتنفيذ بروتوكول مونتريال
الاجتماع التسعون
مونتريال، من 20 إلى 23 يونيو / حزيران 2022
البندان 9 (أ) و (ج) (3) من جدول الأعمال المؤقت¹

برنامج عمل منظمة الأمم المتحدة للتنمية الصناعية (اليونيدو) لعام 2022

¹ الوثيقة UNEP/OzL.Pro/ExCom/90/1

تعليقات وتوصيات أمانة الصندوق

1- تطلب اليونيدو موافقة اللجنة التنفيذية على مبلغ قدره 1,318,454 دولارًا أمريكيًا، بالإضافة إلى تكاليف دعم الوكالة وقدرها 92,292 دولارًا أمريكيًا، لبرنامج عملها لعام 2022 الوارد في الجدول 1. ومرفق الطلب بهذه الوثيقة.

الجدول 1- برنامج عمل اليونيدو لعام 2022

المبلغ الموصى به (دولار أمريكي)	المبلغ المطلوب (دولار أمريكي)	النشاط / المشروع	البلد
القسم ألف: الأنشطة الموصى بها للموافقة الشمولية			
ألف 1: مشروعات تجديد التعزيز المؤسسي			
260,894	260,894	مشروع تجديد التعزيز المؤسسي (المرحلة السادسة)	الجمهورية العربية السورية
98,560	98,560	مشروع تجديد التعزيز المؤسسي (المرحلة السادسة)	تركمنستان
359,454	359,454	المجموع الفرعي لألف 1	
25,162	25,162	تكاليف دعم الوكالة	
384,616	384,616	المجموع لألف 1	
ألف 2: إعداد المشروعات لخطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية			
90,000	90,000	إعداد خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية (المرحلة الثالثة)	الأرجنتين
90,000	90,000	المجموع الفرعي لألف 2	
6,300	6,300	تكاليف دعم الوكالة	
96,300	96,300	المجموع لألف 2	
ألف 3: إعداد خطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية			
57,000	57,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	بنين ^أ
51,000	51,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	بوتسوانا ^أ
51,000	51,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	تشاد ^أ
39,000	39,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	إثيوبيا ^أ
39,000	39,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	غامبيا ^أ
57,000	57,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	غينيا ^أ
170,000	170,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	هندوراس
115,000	115,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	صربيا ^ب
119,000	119,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	الصومال ^ب
51,000	51,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	توغو ^أ
120,000	120,000	إعداد خطة تنفيذ تعديل كيغالي للمواد الهيدروكلوروفلوروكربونية (المرحلة الأولى)	تركيا ^ج
869,000	869,000	المجموع الفرعي لألف 3	
60,830	60,830	تكاليف دعم الوكالة	
929,830	929,830	المجموع لألف 3	
1,410,746	1,410,746	المجموع الكلي (ألف 1، ألف 2، ألف 3)	

^أ برنامج الأمم المتحدة للبيئة بصفته الوكالة المنفذة الرئيسية
^ب برنامج الأمم المتحدة للبيئة بصفته الوكالة المنفذة المتعاونة
^ج برنامج الأمم المتحدة الإنمائي بصفته الوكالة المنفذة المتعاونة

القسم ألف: الأنشطة الموصى بها للموافقة الشمولية

ألف 1: مشروعات تجديد التعزيز المؤسسي

وصف المشروع

2- قدّمت اليونيدو طلبات لمشروعات تجديد التعزيز المؤسسي للبلدان المذكورة في القسم ألف 1 من الجدول 1. ويرد وصف هذه المشروعات في المرفق الأول بهذه الوثيقة.

تعليقات الأمانة

3- استعرضت الأمانة طلبات مشروعى تجديد التعزيز المؤسسي نيابة عن الحكومات المعنية في ضوء المبادئ التوجيهية والقرارات ذات الصلة المتعلقة بالأهلية ومستويات التمويل. وتم فحص الطلبات مقارنة بخطط عمل التعزيز المؤسسي الأصلية للمرحلة السابقة، وبيانات البرنامج القطري والمادة 7، وآخر تقرير عن تنفيذ خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية، والتقرير المرحلي للوكالة، وأي قرارات ذات صلة صادرة عن اجتماعات الأطراف. ولوحظ أن هذه البلدان قدمت بيانات برامجها القطرية لعام 2021 وتمتثل لأهداف الرقابة بموجب بروتوكول مونتريال، وأن استهلاكها السنوي للمواد الهيدروكلوروفلوروكربونية لا يتجاوز الحد الأقصى المسموح به للاستهلاك السنوي المذكور في اتفاقات المواد الهيدروكلوروفلوروكربونية المبرمة مع اللجنة التنفيذية. علاوة على ذلك، تضمنت الطلبات المقدمة مؤشرات أداء للأنشطة المخطط لها للمرحلة التالية من مشروعات التعزيز المؤسسي، وفقاً للقرار 51/74 (ه).

توصية الأمانة

4- توصي الأمانة بالموافقة الشمولية على طلبات تجديد التعزيز المؤسسي للجمهورية العربية السورية وتركمانستان على مستوى التمويل المذكور في القسم ألف 1 من الجدول 1 من هذه الوثيقة. وقد ترغب اللجنة التنفيذية في أن توضح للحكومات المذكورة أعلاه التعليقات الواردة في المرفق الثاني بهذه الوثيقة.

ألف 2: إعداد المشروعات لخطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية

وصف المشروع

5- قدمت اليونيدو طلباً لإعداد المرحلة الثالثة من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية للأرجنتين بصفتها الوكالة المنفذة المعنية، على النحو المبين في القسم ألف 2 من الجدول 1. وقدمت اليونيدو أوصافاً للأنشطة لدعم طلب إعداد المشروع للمرحلة الثالثة من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية، التي شملت: تبريراً للتمويل المطلوب لإعداد المشروع؛ وتقريراً مرحلياً عن تنفيذ المرحلة الثانية من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية؛ وقائمة بالأنشطة التي ستنفذ أثناء إعداد المشروع، والميزانيات المقابلة.

تعليقات الأمانة

6- عند استعراض هذا الطلب، أخذت الأمانة في الحسبان المبادئ التوجيهية لتمويل إعداد خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية لبلدان المادة 5 المذكورة في المقرر 42/71²، وحالة تنفيذ المرحلة الثانية من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية للأرجنتين؛ والقرار 46/84 (ه)³. وأشارت الأمانة إلى أن التمويل المطلوب يتوافق مع المقرر 42/71.

7- وأكدت اليونيدو أن طلب إعداد المشروع للمرحلة الثالثة من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية للأرجنتين سيؤدي إلى إزالة بنسبة 100 في المائة لاستهلاك المواد الهيدروكلوروفلوروكربونية بحلول 1 يناير/ كانون الثاني 2030.

² مبادئ توجيهية لتمويل إعداد المرحلة الثانية من خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية لبلدان المادة 5
³ يُسمح بإدراج المرحلة الثالثة من خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية في خطة العمل فقط لتلك البلدان التي لديها المرحلة الثانية المعتمدة من خطط إدارة إزالة المواد الهيدروكلوروفلوروكربونية مع أهداف خفض أقل من أهداف الامتثال لعام 2025.

توصية الأمانة

8- توصي الأمانة بالموافقة الشمولية على إعداد المشروع للمرحلة الثالثة من خطة إدارة إزالة المواد الهيدروكلوروفلوروكربونية للأرجنتين، بمستوى التمويل المذكور في القسم ألف 2 من الجدول 1.

ألف 3: إعداد المشروعات لخطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية

وصف المشروع

9- قدمت اليونيدو طلبات لإعداد المرحلة الأولى من خطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية لبلد واحد من بلدان المادة 5 بصفتها الوكالة المنفذة المعينة؛ ولثلاثة بلدان من بلدان المادة 5 بصفتها الوكالة المنفذة الرئيسية مع برنامج الأمم المتحدة للبيئة (اليونيب) بصفته الوكالة المنفذة المتعاونة لبلدين وبرنامج الأمم المتحدة الإنمائي لبلد واحد؛ ولسبعة بلدان بصفتها الوكالة المنفذة المتعاونة مع برنامج الأمم المتحدة للبيئة بصفته الوكالة المنفذة الرئيسية، على النحو المبين في القسم ألف 3 من الجدول 1. وطلب اليونيب بصفته الوكالة المنفذة الرئيسية لبلدين وبوتسوانا وتشاد وإثيوبيا وغامبيا وغينيا وتوغو وبصفته الوكالة المنفذة المتعاونة لصربيا والصومال مبلغا قدره 911,000 دولارا أمريكيا، بالإضافة إلى تكاليف دعم الوكالة وقدرها 118,430 دولارا أمريكيا؛ وطلب برنامج الأمم المتحدة الإنمائي بصفته الوكالة المنفذة المتعاونة لتركيا مبلغا قدره 100,000 دولارا أمريكيا، بالإضافة إلى تكاليف دعم الوكالة وقدرها 7,000 دولارا أمريكيا في برامج عمل كل منهما لعام 2022.⁴

تعليقات الأمانة

10- عند استعراض هذه الطلبات، أخذت الأمانة في الاعتبار المبادئ التوجيهية لإعداد خطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية على النحو الوارد في المقرر 50/87، والأنشطة المقترحة لإعداد المشروع وعلاقتها بالأنشطة التمكينية وغيرها من المشروعات المتعلقة بالمواد الهيدروكلوروكربونية في بلدانهم. وقدمت اليونيدو، بصفتها الوكالة المنفذة الرئيسية/ المعينة، أوصافاً للأنشطة لدعم طلبات إعداد المشروعات للمرحلة الأولى من خطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية لهندوراس وصربيا والصومال وتركيا. وشملت الطلبات بيانات عن استهلاك تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية وخطاتها لجميع البلدان. وشملت أنشطة إعداد المشروعات لجميع البلدان الأربعة تقييم الاحتياجات ووضع استراتيجية شاملة للتخفيض التدريجي للمواد الهيدروكلوروكربونية؛ ودراسة استقصائية على الصعيد الوطني وجمع البيانات عن استهلاك المواد الهيدروكلوروكربونية، وتحليل استخدام المواد الهيدروكلوروكربونية والبدائل، بما في ذلك إحصاءات الاستيراد والتصدير لبدائل المواد المستنفدة للأوزون؛ واستعراض السياسات والتشريعات المتعلقة بالتخلص التدريجي للمواد الهيدروكلوروكربونية؛ وجمع وتحليل البيانات الخاصة بقطاع خدمة التبريد وتكييف الهواء، وقدرات الجمارك والإنفاذ، والاحتياجات من التدريب والمعدات، وخطط الاسترداد وإعادة التدوير؛ وجمع البيانات في قطاع التصنيع في بلدين (الصومال وتركيا)؛ واعتبارات تعميم مراعاة المنظور الجنساني؛ ووضع استراتيجية بشأن التقنيات الموفرة للطاقة في السوق لبلدين (صربيا وتركيا).

11- وأوضحت اليونيدو أن إعداد المشروع للاستراتيجيات الشاملة لإعداد خطط تنفيذ تعديل كيغالي للمواد الهيدروكلوروكربونية⁵ في جميع البلدان الأربعة سيستند إلى الأنشطة المنفذة في إطار الأنشطة التمكينية، حيث كانت هذه هي الإجراءات الأولى المرتبطة بالتخفيض التدريجي للمواد الهيدروكلوروكربونية وقد ساهمت في التصديق على تعديل كيغالي.

⁴ الوثيقتان UNEP/OzL.Pro/ExCom/90/15 و UNEP/OzL.Pro/ExCom/90/16
⁵ تاريخ التصديق (أو القبول) على تعديل كيغالي: هندوراس، 28 يناير/ كانون الثاني 2019؛ صربيا، 8 أكتوبر/ تشرين الأول 2021؛ والصومال، 27 نوفمبر/ تشرين الثاني 2019؛ وتركيا، 10 نوفمبر/ تشرين الثاني 2021.

12- وبعد هذا الاستعراض، لاحظت الأمانة أن جميع البلدان الأربعة قد صدقت على تعديل كيغالي؛ وأن البلدان قدمت خطابات تأييد تبين إلى عزمها على اتخاذ إجراءات بشأن التخفيض التدريجي للمواد الهيدروفلوروكربونية؛ وأن التمويل المطلوب يتوافق مع المقرر 50/87.

13- وقدم اليونيب، بصفته الوكالة المنفذة الرئيسية للبلدان المتبقية، واليونيدو بصفتها الوكالة المنفذة المتعاونة، وصفاً للأنشطة المطلوبة لإعداد خطط تنفيذ تعديل كيغالي للمواد الهيدروفلوروكربونية والتكاليف المقابلة لكل نشاط في برامج عملها؛ كما يتم تضمين تعليقات الأمانة فيه.

توصية الأمانة

14- توصي الأمانة بالموافقة الشمولية على إعداد المشروعات لخطط تنفيذ تعديل كيغالي للمواد الهيدروفلوروكربونية لبنين وبوتسوانا وتشاد وإثيوبيا وغامبيا وغينيا وهندوراس وصربيا والصومال وتوغو وتركيا على مستوى التمويل المبين في القسم ألف 3 من الجدول 1.

Annex I

INSTITUTIONAL STRENGTHENING PROJECT PROPOSALS⁶

Syrian Arab Republic: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNID O
Amounts previously approved for institutional strengthening (US \$):		235,18
	Phase I: Jun-93	0
		195,00
	Phase II: Mar-01	0
		203,82
	Phase III: Apr-05	3
		152,86
	Phase IV: Jul-09	7*
		203,82
	Phase V: Nov-14	3
	Total:	990,69
		3
Amount requested for renewal (phase VI) (US \$):		260,89
		4
Amount recommended for approval for phase VI (US \$):		260,89
		4
Agency support costs (US \$):		18,263
Total cost of institutional strengthening phase VI to the Multilateral Fund (US \$):		279,15
		6
Date of approval of country programme:		1989
Date of approval of HCFC phase-out management plan:		2020
Baseline consumption of controlled substances (ODP tonnes):		
(a) Annex A, Group I (CFCs) (average 1995-1997)		2,224.
		6
(b) Annex A, Group II (halons) (average 1995-1997)		416.9
(c) Annex B, Group II (carbon tetrachloride) (average 1998-2000)		0.0
(d) Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
(e) Annex C, Group I (HCFCs) (average 2009-2010)		135.0
(f) Annex E (methyl bromide) (average 1995-1998)		188.6
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:		
(a) Annex A, Group I (CFCs)		0.00
(b) Annex A, Group II (halons)		0.00
(c) Annex B, Group II (carbon tetrachloride)		0.00
(d) Annex B, Group III (methyl chloroform)		0.00
(e) Annex C, Group I (HCFCs)		82.03
(f) Annex E (methyl bromide)		0.00
	Total:	82.03
Year of reported country programme implementation data:		2021
Amount approved for projects (as at December 2021) (US \$):		26,970
		,190
Amount disbursed (as at December 2020) (US \$):		23,655
		,611
ODS to be phased out (as at December 2021) (ODP tonnes):		3,818.
		9

⁶ Data as at December 2020 are based on document UNEP/OzL.Pro/ExCom/88/16.

Summary of the project and country profile	
ODS phased out (as at December 2020) (ODP tonnes):	3,508. 4

* Approval for 18 months as per decisions 58/16 and 58/26

1. Summary of activities and funds approved by the Executive Committee:

Summary of activities	Funds approved (US \$)
(a) Investment projects:	21,512,918
(b) Institutional strengthening:	990,693
(c) Project preparation, technical assistance, training and other non-investment projects:	4,466,579
Total:	26,970,190
(d) HFC activities funded from additional voluntary contributions	250,000

Progress report

2. Despite the challenging situation on the ground and the associated delays experienced, implementation of the phase V of the institutional strengthening project proved successful. The Syrian Arab Republic made relevant progress in updating its ODS licensing system, as well as developing a database programme for the monitoring of ODS in the country. Six awareness-raising workshops were organised in Damascus, Aleppo and Homs, focusing on the conversion to low-GWP alternatives in the foam and air-conditioning sectors of the country. Phase V also equipped the National Ozone Unit (NOU) office with IT equipment, much of which was lost due to the 10-year conflict, to facilitate the implementation of activities.

Plan of action

3. During phase VI, the NOU will continue to focus on updating the licensing system and facilitating the required legislative revisions to ensure the effective enforcement of the system. The database programme developed during the previous phase and the related training of governmental personnel on its use, will be continued and expanded to other relevant stakeholders. Priority will be given to the coordination of the finalization of the HCFC phase-out management plan and to the implementation of appropriate activities to strengthen control of HCFCs. The NOU will follow-up on the issue of initiating measures to improve the control of HCFCs and to achieve the reduction target of 67.5 per cent by 2025. Awareness-raising activities will remain focused on addressing key stakeholders to strengthen the control of HCFC-containing equipment and encourage HCFC alternatives. Greater attention will also be paid to incorporate gender mainstreaming into the work of the NOU during this phase.

Turkmenistan: Renewal of institutional strengthening

Summary of the project and country profile		
Implementing agency:		UNID O
Amounts previously approved for institutional strengthening (US \$):		
	Phase I: Jul-05	115,6 93
	Phase II: Apr-08	107,0 00
	Phase III: Jul-10	77,00 0
	Phase V: Dec-20	98,56 0
	Total:	398,2 53*
Amount requested for renewal (phase VI) (US \$):		98,56 0
Amount recommended for approval for phase VI (US \$):		98,56 0
Agency support costs (US \$):		6,899
Total cost of institutional strengthening phase VI to the Multilateral Fund (US \$):		104,4 59
Date of approval of country programme:		n/a
Date of approval of HCFC phase-out management plan (stage I):		2010
Date of approval of HCFC phase-out management plan (stage II):		2020
Baseline consumption of controlled substances (ODP tonnes):		
(a) Annex A, Group I (CFCs) (average 1995-1997)		37.3
(b) Annex A, Group II (halons) (average 1995-1997)		0.0
(c) Annex B, Group II (carbon tetrachloride) (average 1998-2000)		0.0
(d) Annex B, Group III (methyl chloroform) (average 1998-2000)		0.0
(e) Annex C, Group I (HCFCs) (average 2009-2010)		6.8
(f) Annex E (methyl bromide) (average 1995-1998)		3.6
Latest reported ODS consumption (2020) (ODP tonnes) as per Article 7:		
(a) Annex A, Group I (CFCs)		0.00
(b) Annex A, Group II (halons)		0.00
(c) Annex B, Group II (carbon tetrachloride)		0.00
(d) Annex B, Group III (methyl chloroform)		0.00
(e) Annex C, Group I (HCFCs)		3.77
(f) Annex E (methyl bromide)		0.00
	Total:	3.77
Year of reported country programme implementation data:		2021
Amount approved for projects (as at December 2021) (US \$):		2,009, 889
Amount disbursed (as at December 2020) (US \$):		1,478, 923
ODS to be phased out (as at December 2021) (ODP tonnes):		5.20
ODS phased out (as at December 2020) (ODP tonnes):		5.20

* Excludes US \$319,550, funding received for IS under HPMP from October 2012 to October 2020.

4. Summary of activities and funds approved by the Executive Committee:

Summary of activities	Funds approved (US \$)
(a) Investment projects:	996,636
(b) Institutional strengthening:	398,253
(c) Project preparation, technical assistance, training and other non-investment projects:	615,000
Total:	2,009,889
(d) HFC activities funded from additional voluntary contributions	150,000

Progress report

5. During phase V of the institutional strengthening project, the NOU implemented all the activities agreed within the action plan under the Montreal Protocol to meet the country's obligations, including a licensing and quota system for HCFCs and the enforcement of measures undertaken to monitor illegal ODS trade. Article 7 and Country Programme (CP) data was reported on time to both the Ozone and Fund Secretariats, respectively. The NOU also organized training of customs officers and refrigeration technicians, held meetings with stakeholders, and provided supplementary trainings to technicians in good servicing practices outside the country. The Government participated in national, regional network and international meetings on ozone-related issues during the phase. A number of public outreach activities, including the celebration of World Ozone Day were organized to inform on issues regarding ODS and to raise awareness among the public. Of the 21 performance indicators selected, 14 were fully achieved and 7 were partially achieved.

Plan of action

6. Phase VI will focus on continuing public outreach campaigns for information dissemination and awareness raising efforts; coordination of the implementation of stage II of the HPMP; promotion of the licensing and quota system and its enforcement, as well as on providing information about annual quotas to importers. These efforts will focus on the adoption of legislation prohibiting the destruction of ODS-containing equipment before extraction of ODS with the aim of their reclamation or destruction; promotion for the adoption of legislation for mandatory certification of technicians; preparing and putting in place the technician certification programme; translation and dissemination of the quick guide on good servicing practices for flammable refrigerants; continued monitoring and evaluation activities; development of a communications programme with a special focus on gender issues and the active role of women's involvement. Additionally, the NOU will organize annual stakeholder workshops to raise awareness on low-GWP HCFC alternatives; and collect and report CP data and Article 7 data in a timely manner to the Fund and Ozone Secretariats. The Government of Turkmenistan will continue to actively participate in regional network and global Montreal Protocol-related meetings.

المرفق الثاني

مشروع الآراء التي أعربت عنها اللجنة التنفيذية لمشروعات تجديد التعزيز المؤسسي المقدمة إلى الاجتماع التسعين

الجمهورية العربية السورية

1- استعرضت اللجنة التنفيذية التقرير المقدم مع طلب لمشروعات تجديد التعزيز المؤسسي للجمهورية العربية السورية (المرحلة السادسة) ولاحظت مع التقدير أن الجمهورية العربية السورية قد أبلغت أمانة الصندوق وأمانة الأوزون، على التوالي، ببيانات تنفيذ البرامج القطرية وبيانات المادة 7 لعامي 2019 و 2020 التي تبين أن البلد يمتثل لبروتوكول مونتريال. ولاحظت اللجنة كذلك أن الجمهورية العربية السورية اتخذت خطوات لإزالة استهلاك المواد الهيدروكلوروفلوروكربونية، تشمل الرصد الصارم لتجارة المواد الهيدروكلوروفلوروكربونية من خلال تحديث نظمها الخاصة بالمواد المستنفدة للأوزون ونظامها للترخيص، وتطوير قاعدة بيانات جديدة لبيانات البلدان؛ وتعزيز التعاون مع أصحاب المصلحة الرئيسيين من خلال حلقات عمل لزيادة الوعي بشأن التكنولوجيات البديلة لتسهيل إزالة المواد الهيدروكلوروفلوروكربونية. ولاحظت اللجنة مع التقدير تصديق الجمهورية العربية السورية على تعديل كيغالي في 31 أغسطس/ آب 2020، لذلك، تأمل في أن يخلق البلد بيئة مواتية لدعم إزالة المواد الهيدروكلوروفلوروكربونية.

تركمانستان

2- استعرضت اللجنة التنفيذية التقرير المقدم مع طلب لمشروع تجديد التعزيز المؤسسي لتركمانستان (المرحلة السادسة) ولاحظت مع التقدير أن البلد أبلغ أمانة الصندوق و أشارت أمانة الأوزون، على التوالي، ببيانات تنفيذ البرنامج القطري وبيانات المادة 7 لعامي 2020 و 2021 التي تبين أن البلد يمتثل لجدول الإزالة المحدد في بروتوكول مونتريال. ولاحظت اللجنة أيضاً أن تركمانستان قد أظهرت تنسيقاً ناجحاً مع الوكالات الوطنية وأصحاب المصلحة في إدارة ورصد تنفيذ برامج التخلص التدريجي من المواد المستنفدة للأوزون التي ستساعد البلد في الامتثال لأهداف إزالة المواد الهيدروكلوروفلوروكربونية. لذلك، تأمل اللجنة أن تواصل تركمانستان، في العامين المقبلين، الاستفادة من التقدم المحرز والخبرة المكتسبة في تنفيذ أنشطة التخلص التدريجي من المواد المستنفدة للأوزون، وخاصة لتنفيذ خططها لإدارة إزالة المواد الهيدروكلوروفلوروكربونية على النحو المقرر لتحقيق الامتثال لأهداف الرقابة على استهلاك المواد الهيدروكلوروفلوروكربونية.



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO WORK PROGRAMME

Presented to the 90th Meeting of the Executive Committee of the Multilateral Fund

Introduction

The UNIDO Work Programme (WP) for the consideration of the 90th Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2022-2024.

The 90th UNIDO WP is addressing preparatory assistance and institutional strengthening requests.

Preparatory assistance is submitted for the 90th Executive Committee Meeting consideration for Argentina to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III.

UNIDO is submitting preparatory assistance for HFC phase-down plans for Benin, Botswana, Chad, Ethiopia, Gambia, Guinea, Honduras, Serbia, Somalia, Togo and Turkey to assist the countries with the implementation of the next phases of the Kigali Amendment to the Montreal Protocol.

Institutional strengthening extension request is submitted based on the country request for Syrian Arab Republic and Turkmenistan.

The UNIDO Work Programme for the consideration of the 90th ExCom Meeting comprises the following sections:

- **Section 1:** Consolidated list of activities foreseen for the above requests by project types and country; and
- **Section 2:** Project concepts indicating details and funding requirements.

Funding is requested as follows:

- Preparatory assistance funding for HPMP Stage III for Argentina amounting to US\$ 96,300 (including US\$ 6,300 representing 7.0 % agency support costs);
- Preparatory assistance funding for HFC phase-down plans in Benin¹, Botswana, Chad, Ethiopia, Gambia, Guinea, Honduras, Serbia, Somalia, Togo and Turkey amounting to US\$ 929,830 (including US\$ 60,830 representing 7.0% agency support costs); and
- Institutional strengthening project amounting to US\$ 384,615 (including US\$ 25,162 representing 7.0 % agency support costs).

Total: US\$ 1,410,745 (including US\$ 92,292 agency support cost).

¹ The Project Concepts for Benin, Botswana, Chad, Ethiopia, Gambia, Guinea and Togo are included in the Lead Agency (UNEP) Work Programme.

SECTION 1

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Preparatory Assistance for HPMP											
Argentina	Non-LVC	PRP	HCFC	Overarching	Preparation of Stage III HPMP	90,000	6,300	96,300	7%	24	
SUBTOTAL						90,000	6,300	96,300			
Preparatory Assistance for HFC Phase-Down Plans											
Benin	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	57,000	3,990	60,990	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Botswana	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	51,000	3,570	54,570	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Chad	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	51,000	3,570	54,570	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Ethiopia	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	39,000	2,730	41,730	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Gambia	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	39,000	2,730	41,730	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Guinea	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	57,000	3,990	60,990	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Honduras	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	170,000	11,900	181,900	7%	24	

Country	MLF HCFC Status	Type	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
Serbia	LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	115,000	8,050	123,050	7%	24	In cooperation with UN Environment.
Somalia	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	119,000	8,330	127,330	7%	24	In cooperation with UN Environment.
Togo	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	51,000	3,570	54,570	7%	24	In cooperation with UN Environment. Project concept is in UN Environment Work Programme.
Turkey	Non-LVC	PRP	HFC	SEV	Preparation of HFC phase-down plan	120,000	8,400	128,400	7%	24	
SUBTOTAL						869,000	60,830	929,830			
Institutional Strengthening											
Syrian Arab Republic	Non-LVC	INS	All	SEV	Institutional strengthening	260,894	18,263	279,156	7%	24	
Turkmenistan	LVC	INS	All	SEV	Institutional strengthening	98,560	6,899	105,459	7%	24	
SUBTOTAL						359,454	25,162	384,615			
GRAND TOTAL						1,318,454	92,292	1,410,745			

SECTION 2

PROJECT CONCEPT – Argentina

Multilateral Fund FOR THE IMPLEMENTATION OF THE MONTREAL PROTOCOL HPMP PROJECT PREPARATION REQUEST FORM HCFC phase-out management plan (Overarching strategy)

PART I: PROJECT INFORMATION

Project title:	Argentina HPMP Stage III Preparation	
Country:	Argentina	
Lead implementing agency:	UNIDO	
Implementation period:	2024-2030	
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	90,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Written confirmation – balances from previous PRP funding approved for stage II HPMP had been returned / will be returned (decision 71/42(i))	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Specify meeting at which PRP funding balance had been returned/will be returned 	PRP funding was closed in October 2018.	

A. Information required to support PRP funding (Overarching strategy)

1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage II / <input checked="" type="checkbox"/> stage III of the HPMP			
Phase-out commitment (%)	100%	Year of commitment	2030
<input type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input checked="" type="checkbox"/> Servicing and manufacturing
2. Brief background on previous stage of the HPMP (i.e., when the HPMP was approved; a description of the progress in implementation of the previous stage of the HPMP to demonstrate that substantial progress had been made.)			
<p>At its 79th Meeting, the Executive Committee of the Multilateral Fund approved in principle, stage II of the HCFC phase-out management plan (HPMP) for Argentina for the period 2017 to 2022 to reduce HCFC consumption by 50 per cent of the baseline, in the amount of US \$10,652,125 including agency support cost with UNIDO as lead and World Bank as well as the Government of Italy as cooperating implementing agencies. Under the HPMP Stage II, there has been substantial progress in the servicing sector activities. The delivery of training courses on flammable alternatives is advancing, now that the COVID-19 containment measures have been lifted nation-wide. UTN (the certification body) developed the technician certification programme, in close cooperation with the National Ozone Unit, OPROZ. The first certification exams commenced in 2022. To date, five (5) training courses have been delivered in San Juan (2), Salta (2), and San Miguel de Tucuman, with a total of eighty (80) technicians trained. Certification exams have taken place in San Juan and Salta and twenty-seven (27) technicians</p>			

have been certified. The leak minimization in supermarkets project is now complete. The implementation of the foam sector plan is progressing well, with the conversions of Friostar and Argenpur and progress under the chiller conversion project. OPROZ is also ensuring that the coordination and monitoring of the HPMP, bans and policy and compliance control activities, are delivered in a timely manner and continuous basis.

3. Current progress in implementation of previous stage of the HPMP

Activity	Description	Implementing agency
Legal/regulatory framework	The Government of Argentina has an effective regulatory, legislative and policy framework, designed and implemented in Argentina to support the ODS Import and Export Licensing System.	UNIDO
Manufacturing-Foam PU	The equipment for Argenpur and Friostar was delivered to the two enterprises in January 2022. Installation and commissioning shall take place upon arrival of the Supplier's technicians (Q2 2022). Under the umbrella project with the systems houses, the contract modalities were revised in line with the new UNIDO procurement guidelines. The contracts with the seven participating systems houses shall be signed in Q2 2022.	UNIDO
Manufacturing-REF	The equipment for the conversion was successfully installed and commissioned at Briket and Bambi and in March 2022. Further, the TÜV safety audits were completed for the two enterprises. The final installation, commissioning and verification is still pending for Mabe, due to internal delays at the enterprise	UNIDO
Refrigeration servicing sector	The delivery of training courses on flammable alternatives is advancing, now that the COVID-19 containment measures have been lifted nationwide. UTN developed the technician certification programme, in close cooperation with OPROZ. The first certification exams commenced in 2022. To date, five (5) training courses have been delivered in San Juan (2), Salta (2), and San Miguel de Tucuman, with a total of eighty (80) technicians trained. Certification exams have taken place in San Juan and Salta and twenty-seven (27) technicians have been certified.	UNIDO

4. Overview of current HCFC consumption in ODPt by substance (last three years)

Substance	Sector	2019	2020	2021
TOTAL	(select)	150,74	144,33	169,52

5. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HCFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

In 2019, 2020 and 2021, the actual consumption was 54.4%, 56.4% and 34,9% below the targets set for each year respectively. The low level of consumption in 2021 is due to global supply chain challenges brought on by the COVID-19 pandemic. Due to logistics and transportation issues, over 20 ODP tons of HCFCs due to be imported into Argentina did not arrive before the end of the year. HCFC-22 is the main consumed ODS in Argentina, followed by HCFC-141b. HCFC-22 consumption in manufacturing

has diminished substantially from 2013 due to the conversion of the domestic air conditioning sector. Consumption of HCFC-22 in the servicing sector is still relevant, particularly in the supermarket sector.

6. Description of information that needs to be gathered and updated. Explain why this has not been undertaken during preparation for the previous stage of the HPMP.

Information needed	Description	Agency
Updated sectoral consumption information	Review available information and collect additional data through questionnaires, interviews and site visits to relevant sectors – this data collection could not take place due to COVID-19 and the strict containment measures enforced by the Government of Argentina	UNIDO
Updated HCFC consumption in manufacturing/servicing sector	Review available information and collect additional data through questionnaires, interviews and site visits to relevant sectors – this data collection could not take place due to COVID-19 and the strict containment measures enforced by the Government of Argentina	UNIDO

7. Activities to be undertaken for project preparation and funding

Activity	Indicative funding (US \$)	Agency
Data collection for updated sectoral consumption information.	35,000	UNIDO
Consultations with key stakeholders to obtain an up-to-date assessment of the RAC sector needs in Argentina (operating workshops, training centres, equipment profile, skills, etc) to be addressed under the HPMP stage III.	15,000	UNIDO
Consultations with key industrial sectors in Argentina on the needs and potential investment activities to be addressed under the HPMP stage III	15,000	UNIDO
Preparation of the HPMP stage III and tranche I request, in consultation with national focal points	20,000	UNIDO
Validation workshop with key stakeholders to finalise the HPMP stage III	5,000	UNIDO
TOTAL	90,000	

8. How will activities related to implementation of the Kigali Amendment to phase down HFCs be considered during project preparation for stage II of the HPMP?

The overarching strategy will focus on the HCFC phase out while promoting ozone-friendly, climate friendly and energy-efficient technologies to the extent that this is possible, supporting the activities developed under HPMP-II and finalizing the efforts to HCFCs phase-out.

9. How will the Multilateral Fund gender policy be considered during project preparation?

The Government of Argentina is aware of the Multilateral Fund gender policy contained in ExCom document 84/73, and the related Executive Committee decision 84/92, having received training on this subject matter from UNIDO in 2021. The project preparation will aim to advocate the importance of gender-responsive actions and provisions in developing Stage III HPMP. Relevant stakeholders will be sensitized on the gender policy and efforts will be made to encourage female stakeholders to contribute to the project preparation. To the extent possible, a gender-disaggregated data will be collected.

PROJECT CONCEPT – Honduras

**Multilateral Fund FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI-HFC IMPLEMENTATION PLAN (KIP) project preparation (PRP)
Kigali HFC Phase Down plan (Overarching strategy)**

Part I: Project information

Project title:	HFC phase-down Plan Preparation	
Country:	Honduras	
Lead implementing agency:	UNIDO	
Implementation period for stage I of the KIP:	2024-2029	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify): 24 months		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	170,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required for PRP funding request for the overarching strategy of the KIP

1. Montreal Protocol compliance target to be met in <input checked="" type="checkbox"/> stage I of the KIP			
Phase-out commitment (%)	10% reduction	Year of commitment	2029
<input checked="" type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input type="checkbox"/> Servicing and manufacturing
2. Brief background/description/information on approved relevant projects and multi-year agreements as follows:			
<ul style="list-style-type: none"> The current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects) The current progress in ongoing HCFC phase-out management plan (HPMPs) Consideration of integrating HFC phase-down activities with HPMP activities considering previously approved HFC-related projects, if this information is available. 			
The current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects)			
<p>In response to Decision 79/46 of the Executive Committee on guidelines for Enabling Activities for HFC Phase down, the Government of Honduras submitted a proposal to the 81st Executive Committee meeting of the Multilateral Fund, which approved the project for Enabling Activities of Honduras for HFC Phase Down by a sum of US\$190,000, to facilitate and support the country’s ratification of the Kigali Amendment and to undertake specific initial activities that pave the way to reduce the HFCs in the country through the following lines of actions:</p>			

- Development and enforcement of national laws and regulations to allow ratification of the Kigali Amendment and implementation of its corresponding principles.
- Assessing training and capacity building needs in alternatives to the refrigeration and air conditioning, the polyurethane rigid foam manufacturing, MAC and refrigerated transport.
- Develop a comprehensive modelling tool for forecasting HFC consumption and compliance scenarios under the Kigali Amendment.

It is noteworthy that the implementation of the Enabling Activities is being executed using the existing national infrastructure and institutional setting already established for ODS phase-out activities. The EA project achieved the following outputs and results:

- a) The Government of Honduras ratified the Kigali Amendment to the Montreal Protocol on 29 January 2019. In accordance with the General Regulation on the use of ODS, specifically Executive Agreement 006/2012, it is mandatory to obtain an import/export license for substances controlled by the Montreal Protocol, including HFCs, and to report the information on the imports and sales of HCFCs, HFCs and their alternatives.
- b) The Government of Honduras reviewed the Decree #006/2012 General Regulations on the use of Substances that Deplete the Ozone Layer) to contemplate the national obligations to gradually reduce the use of Hydro Fluorocarbons (HFCs) and promote the use of alternative technology with zero or low Global Warming Potential (GWP) and high energy efficiency.
- c) Honduras carried out several workshops with industry association and importers, academy, government officers, RAC technicians, and other relevant actors with regard the implications of the Kigali Amendment in terms of low-GWP alternatives for HFCs, challenges and barriers to be address for the initial reductions, legal aspects, policies and measures, funding, and technological transfer.
- d) The government carried out a general assessment that included the technical barriers for the adoption of HC refrigerants, penetration of low-GWP alternatives in relevant sector.
- e) The NOU has developed a modelling tool to forecast HFC consumption and potential Kigali Amendment compliance scenarios national.

The current progress in ongoing HCFC phase-out management plan (HPMPs)

Honduras is successfully implementing the fifth and final tranche of the HPMP 1 and the first tranche of the HPMP 2, relevant achievements ah the HPMP are described below:

- a) A study tour to Colombia, during which three staff of the Technical Ozone Unit of Honduras (UTOH) and nine instructors from the national training institute (INFOP) were certified in good practices in refrigeration, allowing them to be evaluators under the RAC certification system in Honduras; the tour also included a visit to a refrigerant stockpiling, recovery and reclaiming centre.
- b) Nineteen training workshops in seven cities provided training to a total of 1,323 RAC technicians and students in good refrigeration practices; six dissemination and awareness-raising sessions for a total of 478 RAC technicians and students promoted the evaluation and certification of good refrigeration practices; 15 vocational training centres were upgraded with equipment and tools for training purposes (e.g., recovery equipment, hand-held electronic leak detectors, service manifold for R-600a and R-290, electronic vacuum gauges, nitrogen kit, and flushing system).
- c) An established a refrigerant reclaiming centre in Tegucigalpa (capital city), which was equipped with equipment purchased under the third tranche (i.e., a refrigeration reclaim unit, cylinders, a cylinder valve remover, and acid test kits); and recovery and recycling practices have been

included in the labour competency standard (Code B712703) including a practical test for technicians.

- d) Awareness raising through dissemination of information on new regulations, good refrigeration practices, and the use of low-GWP alternatives to 86 end-user enterprises, and distribution of 3,000 brochures on HCFC alternatives and 1,000 manuals on good refrigeration practices.

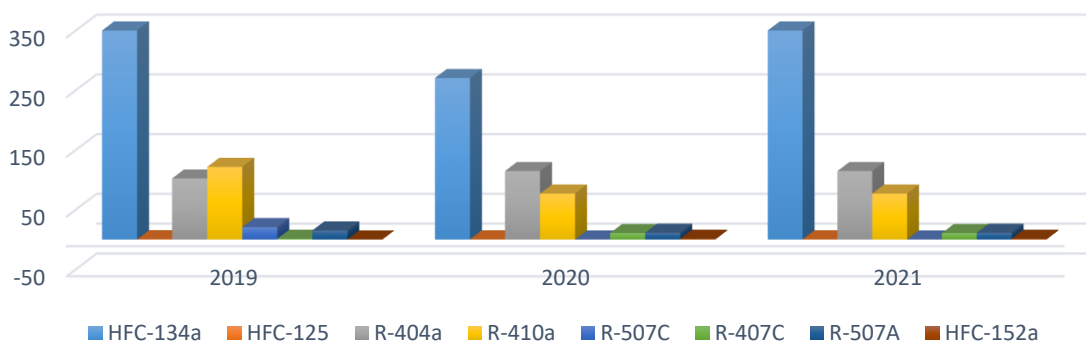
Stage II of the HPMP aims to meet the 67.5 per cent reduction from the HCFC baseline by 2025 and 100 per cent by 2030 and will build upon the experience gained during implementation of stage I. The Government of Honduras is committing not to use any HCFCs after 2030.

3. Overview of current HFC consumption in metric tonnes by substance (last three years)

Substance/blen d	Sector	2019	2020	2021
HFC-134a	RAC servicing	440.4	270.4	384.5
HFC-125	RAC servicing	0.4	0.2	0.2
HFC-152a	RAC servicing	0	1.2	1.2
R-404A	RAC servicing	102.2	114.6	114.6
R-410A	RAC servicing	121.6	76.9	76.9
R-507C	RAC servicing	20.8	0	0
R-407C	RAC servicing	1.2	10.8	10.8
R-507A	RAC servicing	15.1	11.3	11.3
R-448	RAC servicing	0	0	0.4
HFC-365mfc	Manufacturing-Foam PU	0	0	2.0
Total		702	699	602

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

HFC consumption for the period 2019-2021 in Honduras (mt)



Import data confirms that high GWP HFCs imports continue growing rapidly. In that respect, the main HFC refrigerants imported in 2019-2021 period was HFC-134a, as it is widely used in domestic and stand-alone commercial refrigeration and mobile air conditioning, followed by the R-404A, used in commercial refrigeration mainly. In the third places is the R-410A refrigerant, which is used in stationary air conditioning. It is expected that the import of R-410A and R-404A will increase with the implementation of the HPMP to eliminate the R-22 in these sectors. There are other HFC which are increasing such as R-507A and R-507C. There is a small consumption for HFC-125 and HFC-152a in the recent years.

Description of the sector/sub-sector that use HFCs in the country.

- ✓ **Domestic Refrigeration** mainly uses R-134a as refrigerants. The imports of R-600a have been showing an incremental behavior in the recent years.
- ✓ **Commercial refrigeration. Stand-alone equipment.** The most common refrigerants used in this sector are R-134a and R-404A. **Condensing units** can be fully imported as equipment or imported as spare parts to be assembled in the country. Practically all of these units have R-404A as refrigerant.
- ✓ **Refrigeration Centralized systems** Lately, imports of these systems have grown. Refrigerant found in this equipment is R-404A.
- ✓ **Industrial refrigeration.** Industrial refrigeration consumes mainly R-717. However, during the last years, R404A displaced R-717 probably due to the health and safety risks associated to work with ammonia as refrigerant.
- ✓ **Transport refrigeration.** The refrigerant gas consumed in this subsector is mainly R-404A.
- ✓ **Residential AC.** Most common refrigerants used in residential AC are R-22, R-407C and R-410A.
- ✓ **Chillers.** The refrigerant used was R-22. Nonetheless, imports also show other refrigerants such as R-407C, R-410A, and R-717.
- ✓ **Mobile AC.** Mobile AC is related mainly to AC systems in the automobile sector. Until 2020, the most common refrigerant gas used was R-134a. It is expected that the forthcoming years could present new substances such as HFO-1234yf.

5. Description of information that needs to be gathered during project preparation. Explain how this data will be gathered

Information needed	Description	Agency
HFC sectoral consumption information	Update the HFC figures for the recent years and desegregate the consumption by sectors and categories. The data will be gathered through surveys, interviews, databases, and workshops.	UNIDO
Others, specify. HFC procedures	Identification of procedures and regulations to control the HFC in bulk to understand the need to freeze the consumption in 2024. Data will be collected through meetings and interviews with relevant authorities and importers.	UNIDO
Analysis of types of equipmentt using HFCs	Characterization of installed capacity RAC equipment by sectors. Data will be gotten via data bases and studies.	UNIDO
Others, specify. HFC Alternatives - penetration of the low-GWP technologies	Assessment of the low-GWP alternatives to HFCs in Honduras, availability, and cost. The information will be gathered through the elaboration of studies, assessment of relevant available information with industry and other relevant stakeholders.	UNIDO

6. Activities to be undertaken for project preparation and funding (decision 87/xx(b))		
Activity	Indicative funding (US \$)	Agency
<p>1.- Identification of HFC overall consumption by categories for the years 2020,2021 and 2022 with sectorial and sub-sectorial data.</p> <p>Analysis on HFC markets and low-GWP alternatives in the country: HCFC phase-out impact; Technology evolution; Costs & availability; Regulation and standards; and estimation of potential market penetration of low -GWP abatement technologies. HFCs demand estimation in BAU and Kigali Amendment scenarios by sectors and subsectors. Modelling HFC consumption for the Kigali amendment first date compliance in 2029.</p>	USD 35,000	UNIDO
<p>2.- Assessment of capacity building and enforcement: a) Analysis on the national capacities and needs on training and certification in the use of HFC alternatives; b) Evaluation of the Reclaiming and destruction capacity in the country: c) Customs capacity building assessment. Number of customs officers trained and type of equipment to understand the needs training required for the HFC controls, additional capacity building options and tools to comply with the new obligations under the Kigali amendment. d) Assessment of existing legislation, policies and regulations as required for the import/export licensing and quota systems for HFCs.</p>	USD 35,000	UNIDO
<p>3- Conducting studies, stakeholders' workshops, and assessment: a) Assessment of the policies and standards for the promotion of energy efficiency for RAC equipment. b) Identification of the main HFC commercial applications and related end-users: refrigeration technologies in supermarkets, convenience stores, restaurants, hotels, among others. c) Conducting gender baseline assessment, capacity building and monitoring plan.</p>	USD 25,000	UNIDO
<p>4.- Assessment of country level needs for trainings and infrastructure in use of natural refrigerants.</p>	USD 30,000	UNIDO
<p>5 - Communication and outreach plan: Preparation of a comprehensive communication and outreach strategy in consultation with key stakeholders including RAC associations and media.</p>	USD 15,000	UNIDO
<p>6 - HFC phase-down strategy development:</p>	USD 30,000	UNIDO

<p>Technical and legal experts to prepare all documents, consult all key stakeholders and develop detailed strategy. Integration and harmonization of the reports and studies previously developed with respect to HFC consumption, BAT technologies, License system, HFC based equipment, and energy efficiency. Identification of feasible measures to reach Kigali Amendment scenarios in the long, medium, and large term and its associated costs.</p>		
TOTAL	USD 170,000	
7. How will activities related to preparing the KIP be linked to the current stages of the HPMP being implemented in the country? (OPTIONAL)		
<p>Synergies from ongoing and future HPMP activities will be assessed in an integrated manner and incorporated into the HFC phase-down plan development. Furthermore, lessons learned from HPMP implementation will be taken into considered to the extent possible.</p>		

PROJECT CONCEPT – Serbia

**Multilateral Fund FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI-HFC IMPLEMENTATION PLAN (KIP) project preparation (PRP)
Kigali HFC Phase Down plan (Overarching strategy)**

Part I: Project information

Project title:	Serbia Kigali HFC implementation plan (KIP)	
Country:	Serbia	
Lead implementing agency:	UNIDO	
Cooperating agency (1):	UNEP	
Implementation period for stage I of the KIP:	2024-2029	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify): 24 months		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	115,000 US\$
UNEP	Overarching	55,000 US\$

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required for PRP funding request for the overarching strategy of the KIP

1. Montreal Protocol compliance target to be met in <input checked="" type="checkbox"/> stage I of the KIP			
Phase-out commitment (%)	Freeze 10 % reduction	Year of commitment	2029
<input checked="" type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input type="checkbox"/> Servicing and manufacturing
<p>2. Brief background/description/information on approved relevant projects and multi-year agreements as follows:</p> <p><i>A) Current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects)</i></p> <ul style="list-style-type: none"> Survey of consumption, distribution and uses of various alternatives to ODSs for the Republic of Serbia was conducted in 2016 Currently there are no implementation activities of any funded HFC-related project in Serbia. The 80th Executive Committee Decision 80/41 has approved Enabling Activity project. This project was successfully finished at the end of June 2021. <ul style="list-style-type: none"> Serbia ratified the Kigali Amendment on eight of October 2021. Licensing system for import/export of HFCs is established. There are no quotas for import export of HFCs. <p><i>B) Current progress in ongoing HCFC phase-out management plan (HPMPs)</i></p>			

- HCFC baseline consumption for Serbia is determined as 8,37 ODP tones
- The HCFC Phase-out Management Plan for Serbia was approved in December 2010 at the 62nd Meeting of Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol. The last, fourth tranche under the HPMP Stage I was approved at the 84th meeting in December 2019.
 - At the 85th meeting in June 2020 was approved HPMP Stage II for the period 2020 to 2025 to meet the 67.5 per cent reduction in HCFC consumption.
 - Among the policy measures, the enforcement of a certification system for technicians of the servicing sector is a key element for the effective phase-out of HCFCs and for future replacement by HFC-free alternatives.
 -

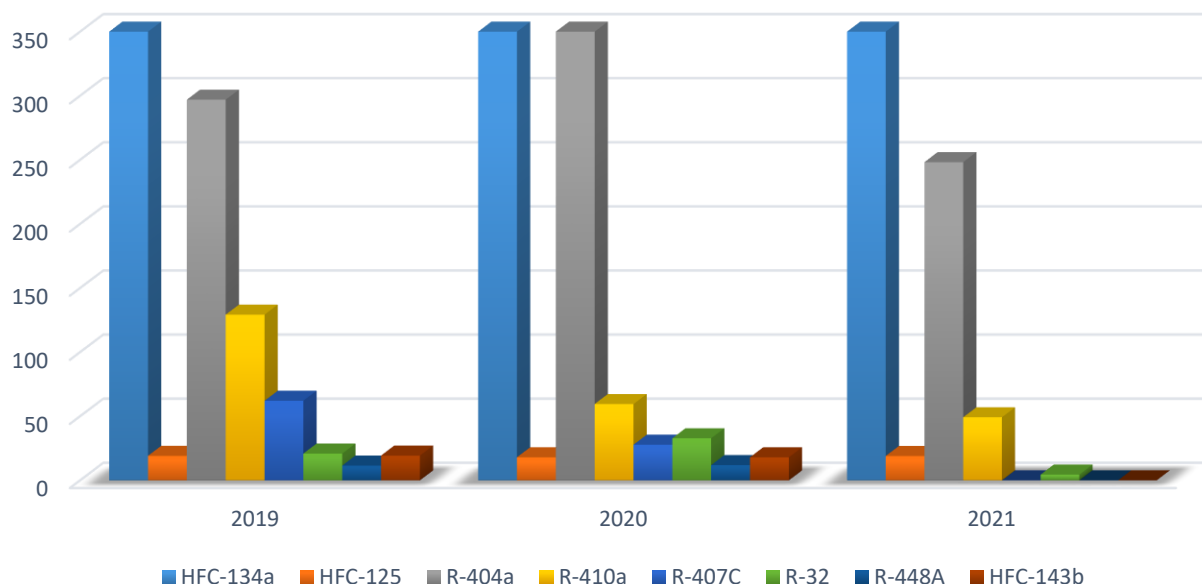
3. Overview of current HFC consumption in metric tonnes by substance (last three years)

Substance/blend	Sector	2019	2020	2021
HFC-125	RAC servicing	19,12	18,00	19,00
HFC-134a	RAC manufacturing and servicing	695,05	477,77	416,97
HFC-143b	RAC servicing	18,32	18,00	0
HFC-32	RAC manufacturing and servicing	20,89	32,83	40,49
R-404A	RAC manufacturing and servicing	296,95	399,91	248,23
R-407C	RAC servicing	62,10	27,83	- 3,44
R-410A	RAC manufacturing and servicing	129,23	59,52	49,21
R-422D	RAC servicing	0,90	2,26	2,83
R-448A	RAC servicing	11,54	11,90	-0,95
R-449A	RAC servicing	3,90	6,35	11,78
R-452A	RAC servicing	0,22	0,42	0,32
R-507A	RAC servicing	0,45	4,86	0,90
SF6	High voltage circuit breakers	1,43	5,52	1,65
Others	All sectors	0	1,54	0,01

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing,)

The refrigeration and air-conditioning sector is the largest user of HFCs in Serbia. HFC-134a and R-404A are widely used refrigerants in RAC manufacturing and servicing sector. HFC-134a is widely used in bigger cooling capacity commercial AC units. HFC-134a is also used in MAC servicing sector. R-404A is the first choice in commercial and industrial refrigeration. It is noticed that consumption of R-410A and R-407C is decreasing in the last three years. R-410A is still widely used in split AC units, heat pumps with smaller capacity for domestic AC and VRV units. There is also a trend of increasing of use of R-32 in split AC units and heat pumps with smaller capacity for domestic AC. Regarding the domestic refrigeration HC-R600a is the main refrigerant used in the last several years. Below there is a graph on consumption in the period 2019-2021.

HFC consumption for the period 2019-2021 in Serbia (mt)



5. Description of information that needs to be gathered during project preparation. Explain how this data will be gathered

Information needed	Description	Agency
Data on HFC consumption in manufacturing/servicing sector	Questionnaires, site visits, interviews with relevant stakeholders	UNIDO
Analysis of the types of equipment using HFCs	Developing of methodology for analysis of collected data	UNIDO
Others, specify.	Update on ODS alternative survey	UNIDO

6. Activities to be undertaken for project preparation and funding (decision 87/xx(b))

Activity	Indicative funding (US \$)	Agency
Stakeholder consultation: Consultant to prepare and conduct questionnaires and interviews with relevant stakeholders to update available data on ODS alternatives, data collection on equipment that works on or relay on HFCs (types and capacity of the units, refrigerant type, refrigerant charge, age and expected lifespan of the equipment, energy efficiency etc.), analyzing collected data, review servicing and manufacturing consumption by sectors; Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control	55.000	UNIDO
Preparation of initial HFC related policies and legislation in line with the draft HFC	17.000	UNEP

<p>phase-down strategy and the overview table of HFC policy and legislative measures already in place, planned to be put in place and not planned to be put in place. This will consider the HFC policy and legislative measures recommended for early implementation including the mandatory reporting by HFC importers / exporters, HFC emission control measures and awareness raising of stakeholders.</p>		
<p>HFC phase-down plan development: Technical and legal experts to prepare all legal and technical documents, consult all key stakeholders and develop detailed plan, including assessment of needs to develop/update trainings and certification scheme in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions, including assessments of the needs for enhancing training programs on recovery, recycling, and destruction. Review of existing RRR scheme, drafting proposal on new concept focused on improvement of existing RRR scheme focused on HFCs. Identification of feasible measures to reach Kigali Amendment scenarios in the long, medium, and large term and its associated costs.</p>	52.500	UNIDO
<p>Communication and outreach plan: Preparation of a communication and outreach plan in consultation with key stakeholders including manufacturers of equipment, investors, building planners, end-users, consumer associations, RAC associations, private sector, supermarkets, cold chain, media experts etc. The plan will focus on technology and policy awareness raising to influence the investment and user behaviour. It will also assess the possible implications of Serbia joining the European Union at some stage in the future.</p>	12.500	UNEP
<p>Capacity building activities related to RAC sector activities and enforcement. Review and assessment of innovative tools and approaches to build the capacity of relevant actors including OzonAction's tools related to HFC phase-down, update of training curricula of vocational schools, university and customs, online training</p>	12.000	UNEP

and certification tools, review of energy-efficiency and minimum performance standards, safety standards, case studies in Serbian language, public procurement policies, potential impact of incentives and taxes, gender considerations, equipment inventories / logbooks, potential of not-in-kind alternatives etc. Translation of the prepared documents		
Preparation national strategy to improve energy efficiency of cooling equipment and review of international performance standards for possible adoption at national level. Review of international safety standards and regulations for the safe handling of alternative refrigerants for possible adoption at national level.	13.500	UNEP
Validation: Consultations, review and validation of the consolidated overarching strategy	7.500	UNIDO
TOTAL	170.000	
7. How will activities related to preparing the KIP be linked to the current stages of the HPMP being implemented in the country? (OPTIONAL)		
<ul style="list-style-type: none"> • Under HPMP Stage II, the activities will enforce an update ODS regulations and electronic reporting system for end-users • Continue on training and certification of service technicians with theoretical and practical components in compliance with F-gas and natural refrigerants standards • Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down plan development without additional costs. Lessons learned from HPMP implementation will be considered to the extent possible. 		

PROJECT CONCEPT – Somalia

**Multilateral Fund FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI-HFC IMPLEMENTATION PLAN (KIP) project preparation (PRP)
Kigali HFC Phase Down plan (Overarching strategy)**

Part I: Project information

Project title:	Kigali HFC implementation plan (KIP)	
Country:	Somalia	
Lead implementing agency:	UNIDO	
Cooperating agency (1):	UNEP	Click or tap here to enter text.
Implementation period for stage I of the KIP:	2024-2029	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify): 24 months		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	119,000
UNEP	Overarching	51,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required for PRP funding request for the overarching strategy of the KIP

1. Montreal Protocol compliance target to be met in <input type="checkbox"/> stage I of the KIP			
Phase-out commitment (%)	Freeze and 10%	Year of commitment	2024 and 2031
<input checked="" type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input type="checkbox"/> Servicing and manufacturing
2. Brief background/description/information on approved relevant projects and multi-year agreements as follows:			
<ul style="list-style-type: none"> The current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects) The current progress in ongoing HCFC phase-out management plan (HPMPs) Consideration of integrating HFC phase-down activities with HPMP activities taking into account previously approved HFC-related projects, if this information is available. 			
<p>The Government of Somalia has implemented a number of project activities related to the Kigali Amendment notably Enabling Activities and HPMP. a) Somalia’s Enabling Activities project on early ratification of the Kigali Amendment and HFC phase-down was approved at the 80th meeting of the Executive Committee with a total funding of US \$150,000 minus agency support costs for UNIDO. Somalia ratified the Kigali Amendment on 27 November 2019. The project was successfully completed in December 2021 and the final report will be submitted to the Executive Committee for noting in June 2022. b) The HCFC Phase-out Management Plan (HPMP) Stage-I: the project was approved at the 67th Meeting of the Executive Committee with a total funding of US\$315,000 for the period 2012 to 2020 to reduce consumption of HCFCs by 35% of the baseline. The established baseline consumption of HCFCs for Malawi is 10.8 ODP tonnes, calculated using the consumption of 5.1 ODP tonnes and 5.5 ODP tonnes reported for 2009 and 2010, respectively, based on the revised survey data, plus 1.68 ODP tonnes of HCFC-141b contained in imported pre-blended polyols systems, resulting in 6.97 ODP tonnes. UNIDO is the lead implementing agency. All three tranches under the HPMP were approved; first tranche at the 67th meeting, second tranche at 77th meeting, and the third and last tranche at 88th meeting. Implementation of the HPMP Stage I will be completed by December 2021. The Government of Somalia has made tremendous progress on the implementation of activities under stage I of the HPMP incl. training of 50 customs officers and other law enforcement, training of 15 refrigeration trainers, and the supply of RAC tools and</p>			

equipment for strengthening HCFCs management. The HPMP Stage-I has successfully enabled Somalia to freeze HCFC baseline in 2013, and achieve 10 percent and over 35 percent reduction in consumption of HCFC by 2015 and 2020 respectively in line with the accelerated HCFC phase-out schedule under the Protocol. The Government of Somalia had been promoting the use of alternative technologies such as natural refrigerants during the implementation of HPMP stage 1.

3. Overview of current HFC consumption in metric tonnes by substance (last three years)

Substance/blend	Sector	2019	2020	2021
HFC-134a	RAC servicing	47.5	34	
HFC-404A	Food retail	9.6	33.2	
HFC-410A	RAC servicing	3.6	150.2	
HFC-407C	RAC servicing	0.6	0.036	

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

Though the ODS alternative survey was not yet submitted and approved for Somalia, the NOU confirms that the commonly used HFCs in Somalia include R-134a, HFC-22 and the HFC blend of R-404A, R-410A, 407C and 600a including newly emerging refrigerants such as R-717 and R-290. The most dominant refrigerants in Somalia are R-134a, followed by 410a, followed by 600a, and 404A.

5. Description of information that needs to be gathered during project preparation. Explain how this data will be gathered

Information needed	Description	Agency
Data on HFC consumption in manufacturing/servicing sector	To develop and implement an effective Kigali HFC implementation plan (KIP), it is critical to have a credible and accurate data on current consumption of HFCs. It is necessary to take stock of the inventory on consumption of HFCs by sector and subsector to understand what strategies need to be developed to effectively phase-down HFCs in the country. The ODS Alternative survey will provide detailed data and information for the period 2019 to 2021. The updated information would enable the country to conduct comprehensive analysis to understand the future consumption of HFCs based on current situation and identify actions to curb the growth of HFCs in the future.	UNIDO
Analysis of types of equipmentt using HFCs	Many of the most cost-effective options for reducing emissions of HFCs involve reducing leaks; responsible handling practices; replacement with a substance with little or no global warming potential; or reducing the amount of the greenhouse gas (GHG) needed. Some of these options can be implemented immediately for quick emission reductions. However, because many of the types of equipment that rely on these gases have lifetimes ranging from 10 to 30 years, fully implementing these emission reductions can take decades. As such, an analysis of HFC based equipment is paramount.	UNIDO

6. Activities to be undertaken for project preparation and funding (decision 87/xx(b))

Activity	Indicative funding (US \$)	Agency
Conduct surveys to determine current consumption of HFCs consumed by different sectors / sub-sectors. The surveys will also determine enterprises in the manufacturing and servicing sector as well as analyse HFC	64,000	UNIDO

based equipment in the country.		
Development of overarching strategy and project document of Kigali HFC implementation plan.	55,000	UNIDO
Review of policies and other legal frameworks in place to ensure compliance to the provisions of the Kigali Amendment.	51,000	UNEP
TOTAL	170,000	
7. How will activities related to preparing the KIP be linked to the current stages of the HPMP being implemented in the country? (OPTIONAL)		
KIP will be prepared according to the findings of on-going HPMP and EA projects. KIP activities to consider capacity building of data collectors incl. customs, technicians, NOU and tools of data modelling.		

PROJECT CONCEPT – Turkey

**Multilateral Fund FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
KIGALI-HFC IMPLEMENTATION PLAN (KIP) project preparation (PRP)
Kigali HFC Phase Down plan (Overarching strategy)**

Part I: Project information

Project title:	Kigali HFC phase-down Plan Preparation	
Country:	Turkey	
Lead implementing agency:	UNIDO	
Cooperating agency (1):	UNDP	Click or tap here to enter text.
Implementation period for stage I of the KIP:	2024-2029	
Duration of PRP implementation (i.e., time (in months) from the approval of PRP to submission of the KIP (please specify): 24 months		
Funding requested:		
Agency	Sector	Funding requested (US \$)*
UNIDO	Overarching	120,000
UNDP	Overarching	100,000

*Details should be consistent with information provided in the relevant sections below.

Part II: Prerequisites for submission

Item	Yes	No
Official endorsement letter from Government, indicating the specifying roles of respective agencies (where more than one IA is involved)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A. Information required for PRP funding request for the overarching strategy of the KIP

1. Montreal Protocol compliance target to be met in <input checked="" type="checkbox"/> stage I of the KIP			
Phase-out commitment (%)	10%	Year of commitment	2029
<input checked="" type="checkbox"/> Servicing only		<input type="checkbox"/> Manufacturing only	<input type="checkbox"/> Servicing and manufacturing
<p>2. Brief background/description/information on approved relevant projects and multi-year agreements as follows:</p> <ul style="list-style-type: none"> The current progress in implementation of any funded HFC-related project (enabling activities or stand-alone HFC investment projects) The current progress in ongoing HCFC phase-out management plan (HPMPs) Consideration of integrating HFC phase-down activities with HPMP activities taking into account previously approved HFC-related projects, if this information is available. 			
<p>Following the outcomes of the 80th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol and subsequently Decision 80/50(e), funding was approved for Türkiye for Enabling Activities for HFC phase-down towards the early ratification of the Kigali Amendment (KA). The main objective of the Enabling Activities is to prepare Türkiye for the ratification and implementation of the HFCs phase-down activities, considering already the legislative framework put in place in Türkiye that requires subsidiary policies and national regulations for enforcement. Türkiye had requested an extension for the implementation of the project that was granted for additional 12 months implementation as per decision 83/40(b). Since the project approval, workshops and consultations have been organized, national consultants were hired, awareness raising</p>			

meetings were organized relevant stakeholders and the reporting mechanisms were updated to include HFCs. The ratification Law has been approved and all of the ratification instruments were sent to UN. All enabling project activities were advancing well until the virus outbreak and pandemic that followed. As per decision Enabling activities were supposed to be completed by June 2020, but due to the current global situation, activities were extended till December 2021. Due the time a series of webinars were created for Turkish Ozone Unit for insights of Kigali Amendment and EU F-Gas Regulation. Main idea was sharing of country experiences, best practices and lessons learnt from the European F-Gas Regulation (EU No 517/2014) and its implementation. Also providing information and recommendations for an effective implementation of the commitments derived from the ratification of the Kigali Amendment for the phase-down of HFCs. In total 6 webinars were arranged between 3 November and 9 December 2020 in the context of Kigali amendment and EU F-Gas regulation, RRR schemes and benefices of refrigerants and Energy Efficiency standards and regulations linked with refrigerants control of end-users.

Table: Activities in implementation of Enabling Activities in Turkey (Budget: 250,000 USD)

Activity	Description	Outputs	Implementing agency
Activities to support the early ratification of the KA	Coordination with Government representatives; Supporting national ratification instruments		UNIDO
Institutional arrangements	Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain; Training of technicians on reducing refrigerant emissions as well as on the use of flammable and toxic low-GWP alternatives		UNIDO
Licensing systems	Preparing harmonized tariff codes according to HFCs commitments, with special attention to HFC blends		UNIDO
Data reporting on HFC consumption	Review of the national mechanisms used for ODS reporting to include HFCs consumption		UNIDO
Preparation for national strategies	Assessment of the refrigeration and air-conditioning servicing sector; HFCs national surveys for the years 2017 – 2019, following the guidelines for ODSs alternatives survey in forecasting HFCs future consumption ; Identification of policies and regulations to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies		UNIDO

The Government of Türkiye has ratified the KA on 10 November 2021 and requested UNIDO to proceed with the next steps and requesting funding for preparing HFC phase-down plan. Taking into consideration that the Kigali Amendment to the Montreal Protocol came into force on the 1st of

January 2019, and Türkiye has updated its reporting mechanism to include HFC, the country will be able to follow up on the reporting obligation, since the amendment was officially ratified. Türkiye has already created an enabling environment for the phasedown of HFCs.

In order to support the implementation of the Montreal Protocol, the HCFCs Phase-out Management Plan (HPMP) was approved in December 2012 in Montreal by the Multilateral Fund and the project is executed with UNIDO as lead implementing agency. Türkiye decided to implement controls on F-gases through a national By-law on F-gas that is based on the EU Reg. (EC) 842/2006 which entered into force at the beginning of 2018 and a draft By-law in compliance with 517/2014 was preparing for phasing-out of HFCs. According to the Survey Report carried out from April to August 2019, the most commonly used ODS alternatives in Türkiye include HFC-134a and HFC-152a. The second most commonly used alternative is HFC-152a has been widely used for all XPS foam producers. Other HFCs are generally used as components of blends used mainly in the refrigeration, air conditioning; in middle scale in foam and small scale in firefighting and other applications. The two HFC blends currently used are R-410A and R-404A. To implement the control and phase out of HCFCs, a number of legal provisions will be put in place including the control of import and sale of HCFCs through a reducing quota system and the anticipated regulations to make the recovery and reclamation of refrigerants mandatory for all refrigeration service. A functional RRR network requires certified technicians and certified service shops responsible and running their businesses in line with the new certification scheme and with the F-Gas Regulation. For this reason, priority was given to RRR activities at the current stage of HPMP. Within the scope of the activity of ‘Enhancement of the RRR (recovery, recycling, reclamation) network, including the upgrading of three additional reclamation centers and laboratories, and associated recovery equipment, cylinders and tools’ under the HPMP, three refrigerant reclamation centers will be set up in Türkiye. The success in establishing and operating the refrigerant reclamation centers will lead to smoothening of the phase-out of HCFCs and also phase down of HFCs. Three premises have been selected by the Government of Türkiye with a conducted survey. The procurement of equipment is in progress along with continued training activities.

Türkiye has already phased out 98.1 per cent of its HCFC consumption baseline. The verification reports of HPMP have confirmed that there is an operational licensing and quota system in place for HCFC imports and exports that can ensure compliance. The Government of Türkiye has also promulgated a robust set of regulations to support HCFC phase-out, completed all investment projects under stage I, including more than 200 foam enterprises and systems houses, and phased out HCFC in the manufacturing sectors. Activities in the refrigeration servicing sector included the development and enforcement of the technician certification scheme, training and certification of 1,631 technicians, updating the refrigeration training curricula, and ongoing projects to demonstrate low-GWP technologies. Stage I of the HPMP till 2025 would allow for additional time to complete ongoing activities in the refrigeration servicing sector. The Government of the Republic of Türkiye with respect to the reduction of controlled use of the ozone-depleting substances (ODS) to achieve 100 per cent phase-out by 1 January 2025 in compliance with Montreal Protocol schedules.

Since the phasing-out of ODSs expected to be finalized by 2025, it is not considered by the Government of Türkiye to integrate HFC phase down activities with HPMP activities taking into account previously approved HFC-related projects.

3. Overview of current HFC consumption in metric tonnes by substance (last three years)

Substance/blend	Sector	2019	2020	2021
R134a	Manufacturing-Foam	1827,45	981,01	
	Manufacturing-AC	914,34	396,12	
	Manufacturing-REF	235,56	99,77	
	RAC servicing	2261,1	1133,00	
R1234YF	Manufacturing-Mobile	465,2	423,77	

	AC			
	RAC servicing	11,44	11,74	
R32	Manufacturing-AC	644,19	1164,52	
	RAC servicing	58,46	35,09	
R410A	Manufacturing-AC	359,18	72,63	
	RAC servicing	564,14	502,81	
R404A	Manufacturing-REF	291,33	117,92	
	RAC servicing	1487,61	1127,13	
R507A	RAC servicing	51,62	-	
R407C	Manufacturing-AC	1,97	30,95	
	Manufacturing-REF	7,57	3,94	
	RAC servicing	747,36	931,16	
R23	Manufacturing-REF	-	0,23	
HFO Blends	Manufacturing-AC	2,550	4,250	
	Manufacturing-REF	71,684	110,207	
HC (R600/290)	Manufacturing-AC	121,0	165,0	
	Manufacturing-REF	920,3	679,7	
	RAC servicing	10,50	12,18	
R227ea	Fire fighting	-	345,90	
R125	Fire fighting	-	382,89	
R152a	Manufacturing-Foam XPS	1136,38	1247,17	
Other Blends	Manufacturing-REF (R508B)	-	108,35	
R245fa	Manufacturing-Foam XPS	24,782	4,89	
	Other, specify. - OCR	-	71,21	
R236fa	Fire fighting	19,904	9,41	
Others	Manufacturing-Foam XPS	538,73	221,37	
R717	RAC servicing	7,40	7,60	
R744	RAC servicing	16,14	11,14	
Total		12259,16	10413,06	

4. Based on the consumption data given above, please provide a description of the sector/sub-sector that use HFCs in the country, including a short analysis and explanation of the consumption trends (i.e., increasing or decreasing)

Türkiye uses HFCs and their blends mainly in three sectors:

- Manufacturing of refrigeration equipment;
- Servicing sector for air-conditioning and refrigeration;
- Mobile air-conditioning

As indicated in the figure below, commercial refrigeration applications R404A is the main dominant refrigerant as in CO₂eq (30%) although R134 has the highest portion in kgs (26%). Based on GWP approach, the percentage of R32 which has low GWP is reducing to 5% from 11% (in kgs). Even though lower GWP alternatives of R404A provides better energy efficiencies, it is seen that producers still willing to continue to use R404A due to its easiest availability and low-cost. Without any regulatory effect, it seems that R404A continue to demand. HC and HFO Blend alternatives is well known for many producers customers and mainly they consume these alternatives just for export market demands (especially to EU).

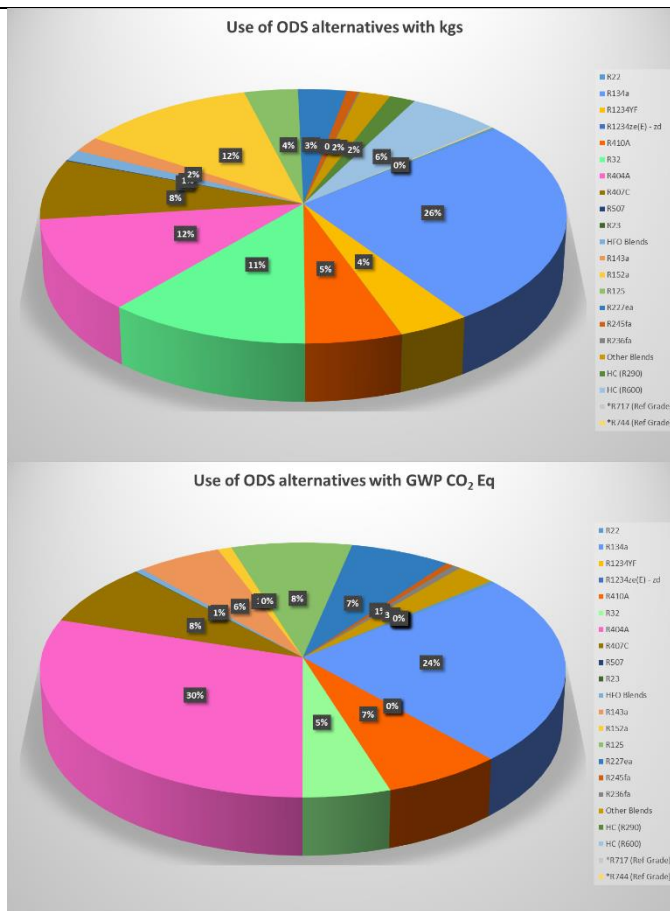


Figure: Use of ODS alternative with kgs and GWP CO_{2eq} in Türkiye in 2020

Below figure shows the import amounts of HFCs in Türkiye in 2016-2020 based on ton CO₂ equivalent. It is seen that R404A and R134A dominate over the years among others. Furthermore, the import of R410A which is used for RAC sector significantly decreased in 2020. Overall, until 2020, the import of HFCs shows an increasing trend. Prohibitions of disposable containers importation as of 1/1/2020 and HFC's blend production starts in 2020 resulted in a drastic increasing in import figure in 2019 with the aim of stocking especially disposable cylinder used in RAC service sector (mainly R404A, R134a, R410A, R407C). Therefore, stockpile of disposable containers in 2019 reduces the import of related HFCs in 2020.

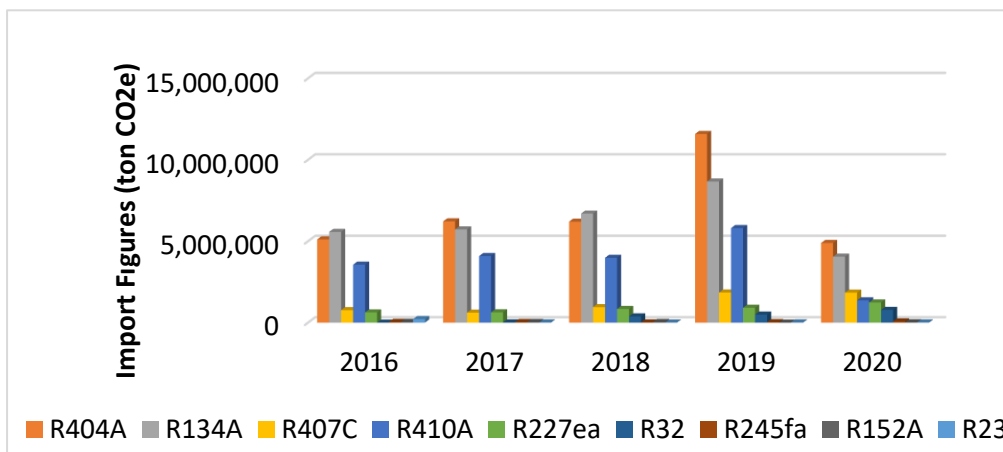


Figure: Import amounts of HFCs in 2016 - 2020

The latest ODSs and HFCs survey carried out under Enabling Activities project estimated a steady growth in the consumption of HFCs and blends, as result of the expected GDP growth and population push (increase of total population and population living in urban areas) for more air-conditioning, refrigeration units and their service. The survey found that as the country is already taking action in introducing HFCs control, but the import of readily available alternatives on the market (i.e. high-GWP HFCs and their blends) needs special attention. The high values for the consumption of HFC-134a are due to its price. Furthermore, chillers and air-conditioning equipment are also using HFC-134a. The use of R-410A is second to R-134a in metric tonnes since this alternative is increasingly being used in the commercial and central air conditioning applications like rooftop packaged units and large splits.

Household A/C, Commercial A/C and Automotive A/C industries organized and fully aware about regulation and upcoming Montreal Protocol Kigali amendments. Turkey used to be production base for split type A/C unit production. Split type A/C unit producers highly adopted to R32 applications instead of R410A not only for GWP effect also they realize that they could provide better energy efficiency level. Chiller Manufactures still prefer to use R134a and R410A in their applications. It seems that without any regulatory effect, they will continue to use current alternatives.

Rigid PU foam sector already adopt n-Pantene solutions, XPS sector mainly decide to move (R152a) low GWP solutions, and on the other hand they are looking for HC (R600a) solutions as well.

In the Fire Fighting sector, high GWP solutions are widely used. Mainly all the sector already aware about the Natural (CO₂) and new generation (FK-5-1-12) solutions. These solutions already available in firefighting sector but due to its easier design and low build up cost still high GWP solutions has been used. Survey found that with only phase-down schedule effect firefighting sector will move to alternative solutions.

In MAC manufacturing there are specific car applications. In products for the EU market and in Domestic applications, 100% of the manufactures start to produce with HFO (R1234yf); only for non-EU Export market MAC cars are charged with R134a. However, for other application, producers still using R134a. But from 2020, some mini/bus and truck producers are willing to consider the use of HFO for their EU exports, due to EU F-gas regulations.

In the service sector R134a, R410A and R404A are the three dominant refrigerants. Based on the top down and bottom up cross checking activates it seems that last 10 years Turkeys ODS alternative bank increased significantly.

Mobile air-conditions HFO transitions is due to regulatory effect, and A/C split unit R32 transition in near future to HFO and R32 will trigger an increase in service demands. For industrial applications, R404A currently keeps its popularity.

To conclude, Türkiye has expanding the export market for Household A/C, Commercial A/C and Automotive A/C industries, especially to EU and this forces sectors for uses of low GWP or natural alternatives directly. However domestic market still need demanding HFCs and service needs looks to be last a long time. Upcoming National regulation will have a driven effect on sectors, and currently with the support of the project activities, each sector has acquaint with informative events by the Ministry.

5. Description of information that needs to be gathered during project preparation. Explain how this data will be gathered

Information needed	Description	Agency
HFC sectoral consumption information	Update the HFC figures for 2021 and desegregate the consumption by sectors and	UNIDO

	categories.	
6. Activities to be undertaken for project preparation and funding (decision 87/xx(b))		
Activity	Indicative funding (US \$)	Bilateral/implementing agency
Conducting interviews, organizing workshops and stakeholders' consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control; conducting survey of HFC consumption in the country; conduct gender baseline assessment, capacity building and monitoring plan.	45,000	UNIDO
Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction	20,000	UNIDO
Communication and outreach plan preparation and development of awareness raising activities	15,000	UNIDO
Conducting studies, stakeholders' workshops and assessment related to the HFC phase down strategies, sector effects and sector based strategies.	30,000	UNIDO
Validation: Consultations, review and validation of the consolidated overarching strategy	10,000	UNIDO
TOTAL	120,000	
Conducting industry surveys, individual data collection, interviews, organizing workshops and stakeholders'	40,000	UNDP

consultations for the integration of national regulations and procedures for KA implementation and consolidation of technical capacities in the institutions involved in HFC control; conduct gender assessments; Data collection and analysis for future preparation of HFC phase-down investment programmes in selected sectors (combined manufacturing and servicing); Exploring synergies with sustainable cooling EE aspects in industry/commerce/ public and private sectors under ongoing parallel programmes; development of Minimum Energy Performance Standards for cooling		
Assessment of country level needs for trainings and certification in use of flammable refrigerants, developing training plan and organizing workshops with main stakeholders and training institutions; including assessments of the needs for enhancing training programs on recovery, recycling and destruction	20,000	UNDP
Communication and outreach plan preparation and development of awareness raising activities	15,000	UNDP
Conducting studies, stakeholders' workshops and assessment related to the promotion of energy efficiency	25,000	UNDP
TOTAL	100,000	
7. How will activities related to preparing the KIP be linked to the current stages of the HPMP being implemented in the country? (OPTIONAL)		
Synergies from ongoing and future HPMP activities will be assessed and integrated into the HFC phase-down management plan development to the extent possible.		

Country: Syrian Arab Republic

Title: Institutional Strengthening for the implementation of Montreal Protocol in Syria

Project Duration: 24 months (July 2022 – June 2024)

Project Budget: 260,894 (excl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Local Administration and Environment / National Ozone Unit (NOU)

Project Summary

Despite the challenging situation on the ground and associated delays experienced, the implementation of the IS Phase V proved successful and the country is now ready to apply for the next stage of funding. Syria has made relevant progress with updating its ODS licensing system, as well as developing a database programme for the monitoring of ODS in the country. Similarly, six awareness raising workshops have been organized in Damascus, Aleppo and Homs, focusing on the conversion to low-GWP alternatives in the foam and air-conditioning sectors of the country. The commitment of the country to comply with the Montreal Protocol obligations is continually demonstrated by the dedication of NOU staff and by the country consistently meeting Montreal Protocol reporting obligations. Phase V also equipped the NOU office with needed IT equipment – much of which was lost due to the 10-year conflict – to facilitate the implementation of activities.

The Institutional Strengthening Phase VI will continue to focus on updating the licensing system and facilitating required legislative revisions to ensure its effective enforcement. Similarly, the database programme developed in phase V and the training of governmental personnel on its use, will be continued and expanded to all other relevant stakeholders. Notably, priority will be given to the coordination of the finalization of the HCFCs management plan and on implementing appropriate activities to strengthen the control of the HCFCs and to achieve the country's reduction target of 67.5% by 2025. Awareness raising activities will remain focused on addressing key stakeholders involved in the control of HCFCs. Special attention is to be given to strengthen the control of HCFCs containing equipment and encourage alternatives of HCFCs, with the objective to reduce the HCFCs consumption. Lastly, greater attention will be paid to incorporate gender mainstreaming and the achievement of the included gender-specific indicators in Phase VI.

Country: Turkmenistan

Title: Institutional Strengthening for the implementation of Montreal Protocol in Turkmenistan

Project Duration: 24 months (January 2023 – December 2024)

Project Budget: 98,560 (excl. 7% Agency Support Costs)

Implementing Agency: UNIDO

Coordinating Agency: Ministry of Agriculture and Environment Protection / National Ozone Unit (NOU)

Project Summary

The NOU of Turkmenistan has successfully implemented all the activities agreed within the action plan under the Montreal Protocol to meet the country's obligations on time. These included a licensing and quota system for HCFCs and the enforcement of measures undertaken to monitor illegal ODS trade through extensive capacity building as well as other relevant obligations. The Government of Turkmenistan has established a ban to export and import ODSs included in Annexes A, B and E of the Montreal Protocol, as well as their transit through the territory of Turkmenistan from and to States that are not Parties to the Montreal Protocol. It is also prohibited to export and import products and equipment that use substances included in the Annexes A, B and C to the Montreal Protocol. Additionally, Article 7 and Country Programme (CP) data reports were submitted on time. Furthermore, the NOU organized several training of customs officers and refrigeration technicians, and held meetings with the stakeholders and provided supplementary trainings to technicians in good servicing practices outside the country. In addition, the government of Turkmenistan participated in national, regional network and international meetings on ozone-related issues. A number of public outreach activities including the celebration of World Ozone Day were organized to spread the most important issues regarding ODS and to raise awareness widely among the public.

Phase VI of the IS project will focus on continuing public outreach campaigns for information dissemination and awareness raising efforts; coordination of the implementation of stage II of the HPMP; promotion of the licensing and quota system and its enforcement, as well on providing information about annual quotas to importers. These efforts will focus on the adoption of legislation prohibiting the destruction of ODS-containing equipment before extraction of ODS with the aim of their reclamation or destruction; promotion for the adoption of legislation for mandatory certification of technicians; preparing and putting in place the technician certification programme; translation and dissemination of 500 copies of the quick guide on good servicing practices for flammable refrigerants; continuing monitoring and evaluation activities; develop a communications programme with a special focus on gender issues and the active role of women's involvement. One of the activities will be to organize annual stakeholder workshops to raise awareness on low-GWP HCFC alternatives; collect and report data in a timely manner to the Fund and Ozone Secretariats (reporting CP data and Article7 data to the Multilateral Fund and the Ozone Secretariats, respectively). The Government of Turkmenistan will continue to actively participate in regional network and global Montreal Protocol meetings, by exchanging information, knowledge and experience that will foster the implementation of national policies and strategies for the protection of the ozone layer.